



Agenda item 10.2
Author(s) / Submitter(s) Secretariat (DSG)

Draft plan for Recommendations to be referenced in Standards

1. SUMMARY

This paper

- Gathers information from our previous PAP work on Standards, Recommendations and Guidelines, and
- Proposes new and amended Recommendations, and other changes, aimed at ensuring we have a complete and logical set of Recommendations to be referenced in Standards.

It carries document numbers based on the numbering system agreed at PAP31, refer report clause 4.2.

2. ACTION

The PAP is requested to

1. Study the tables below and send any comments, suggested changes, to the DSG by 01 March 2017
2. Finalise a definitive version during PAP Session 33 to inform our future work programme and for input to Council session 64, June 2017, and
3. Consider what parts of the necessary work could be completed before Council 65 in December 2017, and what should be deferred to the 2018-20122 work programme.
4. Note that the work which we thus plan to complete by December 2017 may require alterations or additions to the Recommendations listed in the draft Standards.

Gaps in our line-up of Recommendations – Working paper

MDC 2017-01-13, Revised 2017-02-08

Indicates NEW or amended Recommendation is required	Indicates action needed, or a new or amended Guideline, etc.
Some items are from earlier PAP work, some are new from DSG.	

Standard	Topic area	Reference		Recommendation	Comment
IALA1010 AtoN Planning and Service Requirements	Maritime Buoyage System	IALA1010-R1001 NEW 2017	Normative	<p>The Maritime Buoyage System</p> <ul style="list-style-type: none"> This Recommendation will <ul style="list-style-type: none"> note the original but superseded International Agreement note the subsequent amendment of the original scheme to include additional marks and note the universal acceptance of the MBS worldwide refer to a Guideline for details of the MBS 	<p>Guideline to consist of the present IALA MBS booklet as an interim measure.</p> <p>Then a new Guideline in the the new corporate style and its distribution in the usual way via the website.</p> <p>Today we have no Recommendation or Guideline for the MBS, only a booklet which has unclear status in our document structure.</p>
	Obligations, International & national criteria	IALA1010-R1002 NEW	Normative	<p>The need for a national competent authority for marine aids to navigation and vessel traffic services</p> <ul style="list-style-type: none"> Recommends one or two authorities depending on national preferences or arrangements 	<p>New Guideline(s) describing purpose, management, legislation needs, regulation needs, perhaps with examples of legislation and regulation clauses to assist understanding.</p> <p>WWA teaches its students in this area but we have no Recommendation or Guideline.</p>
		IALA1010-R1003 NEW	Normative	<p>The international obligations of competent authorities</p> <ul style="list-style-type: none"> IMO SOLAS, UNCLOS, EU Directives, etc. 	<p>New supporting Guideline detailing references and obligations.</p> <p>WWA teaches in this area but we have no Recommendation or Guideline.</p>
		IALA1010-R0105 E-105		The Need to Follow National and International Standards	Withdrawn by Council 63
	Levels of service objectives, Availability and Categories	IALA1010-R0130 O-130	Normative	Categorisation and Availability Objectives for Short Range Aids to Navigation	

	Risk Management Toolbox	IALA1010-R1004 NEW	Normative	Risk management for aids to navigation and related services	Guidelines on: <ol style="list-style-type: none"> IWRAP PAWSA Simple qualitative tool Prepare for future IALA-approved risk analysis software that directly accesses and uses our stored IALANET AIS data
		IALA1010-R0142 E-142	Informative	Maritime Data Sharing 'IALA-NET' <ul style="list-style-type: none"> New title "Maritime data sharing for risk assessment and analysis" 	Revise this Recommendation to note the storage and use of historical [AIS and other] data for risk analysis. Guideline(s) on: <ul style="list-style-type: none"> How to connect to IALA net Data format(s)
		O-134		The IALA Risk Management Tool for Ports and Restricted Waterways	Withdraw this and create R1004 and its Guidelines
		IALA1010-R0138 O-138	Informative Normative	The Use of GIS and Simulation by Aids to Navigation Authorities	The informative content should become a <u>normative</u> recommendation
	Quality management, Record keeping	IALA1010-R0132 O-132	Normative	Quality Management for Aids to Navigation Authorities	
		IALA1010-R0118 O-118	Normative	The Recording of Aids to Navigation Positions	
	Offshore signals, Bridge signals, Traffic signals	IALA1010-R0111 E-111	Normative (?)	Port Traffic Signals	Should this one be normative? Is this type of marking in port areas within the scope of IALA?
		IALA1010-R0113 O-113	Normative	The Marking of Fixed Bridges and Other Structures over Navigable Waters	
		IALA1010-R0139 O-139	Normative	The Marking of Man-Made Offshore Structures	
	AIS, AIS AtoN, Virtual AtoN	IALA1010-R0143 O-143	Informative	Provision of Virtual Aids to Navigation	Does this need updating or revision?

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IALA1020 AtoN Design and Delivery	Visual AtoN	IALA1020-R0106 E-106	Informative	The Use of Retroreflecting Material On Aids To Navigation Marks Within The IALA Maritime Buoyage System	
		IALA1020-R0108 E-108	Normative	The Surface Colours used as Visual Signal on Aids to Navigation	
		IALA1020-R0110 E-110	Normative	The Rhythmic Characters of Lights on Aids to Navigation	
		IALA1020-R0112 E-112	Normative	Leading Lights (*including Leading Line Design Program ver 2.02)	
		E-200-1		Marine Signal Lights Part 1 - Colours	Should it be a guideline?
		IALA1020-R0104 O-104	Normative	Off Station Signals for Major Floating Aids	
	Range and Performance	IALA1020-R0200 E-200-0	Normative	Marine Signal Lights Part 0 – Overview	Change to Normative as master for E-200-xx series which become Guidelines
		E-200-2		Marine Signal Lights Part 2 - Calculation, Definition and Notation of Luminous Range	Becomes a Guideline
		E-200-3		Marine Signal Lights Part 3 - Measurement	Becomes a Guideline
		E-200-4		Marine Signal Lights Part 4 - Determination and Calculation of Effective Intensity	Becomes a Guideline
		E-200-5		Marine Signal Lights Part 5 - Estimation of the Performance of Optical Apparatus	Becomes a Guideline
	Design, Implementation & Maintenance	IALA1020-R0126 A-126	Informative	Use of the AIS Aid to Navigation in Marine Aids to Navigation Service	<ul style="list-style-type: none"> Change title to make clear that it is AIS AtoN Consider to split into Recommendation and Guideline Make sure it is compatible with the new VDES documents below
	Power systems				
	Floating AtoN	IALA1020-R0107 E-107	Informative	Moorings for Floating Aids to Navigation	
	Environment, Sustainability & Legacy	IALA1020-R1001 NEW	Informative	New Recommendation to become the parent of environment protection Guidelines on mercury, batteries, paints, etc.	<ul style="list-style-type: none"> Capture existing documents and/or add new Guidelines. Include safety of personnel too?

		IALA1020-R1002 NEW 2017	Informative	<p>Protection of the built heritage of lighthouses and other aids to navigation</p> <ul style="list-style-type: none"> • An informative Recommendation to recognise the need to preserve AtoN heritage and to assist members having heritage obligations • Important for 2018 Conference 	<ul style="list-style-type: none"> • Recognises need • Refer to the Manual in the Recommendation, rather than create Guidelines.
	Additional AtoN systems, including Sound signal	IALA1020-R0109 E-109		The Calculation of the Range of a Sound Signal	This should be a Guideline under Range and Performance. Maybe not under IALA1020-R0200, which is on signal lights. Perhaps an orphan with no parent Recommendation?

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IALA1030 Radionavigation Services	Satellite positioning and timing	IALA1030-R1001 NEW	Informative	WAS augmentation for maritime use	EGNOS, other national WAS, and existing ENAV work to date may inform a Guideline.
	Terrestrial positioning and timing	IALA1030-R1004 NEW	Informative	Terrestrial radionavigation systems Can note the IMO multi-sensor receiver for SOLAS ships (NCSR/MSC)	Supporting Guidelines 1. eLoran. (Refer to an RTCM document?) 2. R-Mode operation of MF broadcasting stations 3. R-Mode use of AIS signals 4. Intelligent radar beacons (racons) 5. Guidelines for the creation or use of other emissions as the need arises, e.g Signals of Opportunity
		R-129		GNSS Vulnerability and Mitigation Measures	<ul style="list-style-type: none"> Becomes a Guideline under IALA1030-R1001 above. Maybe some text from R-129 can inform Recommendation IALA1030-R1001
	RACON & Radar positioning	e-NAV-146		Strategy for Maintaining Racon Service Capability	<ul style="list-style-type: none"> Change title Revision needed. Becomes Guideline under IALA1030-R0101 below
		IALA1030-R0101 R-101	Normative	Marine Radar Beacons (racons)	<ul style="list-style-type: none"> Check content E-NAV-146 becomes a Guideline under this Recommendation
	Terrestrial augmentation services (DGNSS)	IALA1030-R0115 R-115	Normative	The Provision Of Maritime Radionavigation Services In The Frequency Band 283.5-315 kHz In Region 1 and 285-325 kHz In Region 2 And 3	
		IALA1030-R0121 R-121	Normative	The Performance and Monitoring of DGNSS Services in the Frequency Band 283.5 - 325 kHz	
		IALA1030-R0150 R-150	Informative	DGNSS service provision upgrade and future use	<ul style="list-style-type: none"> Does this need revision? Merge with R-135? Do we need to mention R-mode here too?
		R-135		The Future of DGNSS	<ul style="list-style-type: none"> Should be guideline, do not list in standard Is it still valid? Add R-Mode? Withdraw this document?
Standard	Topic area	Reference		Recommendation	Comment
IALA1040 Vessel Traffic Services	VTS implementation	IALA1040-R0102 V-102	Informative	The application of the 'User Pays' principle to Vessel Traffic Services	

		IALA1040-R0119 V-119	Normative	The Implementation of Vessel Traffic Services	
		IALA1040-R0120 V-120	Informative	Vessel Traffic Services in Inland Waters	<ul style="list-style-type: none"> • Is this still needed and used? • EU rules, USA practices?
	VTS operations	IALA1040-R0127 V-127	Normative	Operational Procedures for Vessel Traffic Services	
	VTS data and information management	IALA1040-R0125 V-125	Normative	The use and presentation of symbology at a VTS centre	
	VTS communications	IALA1040-R1001 NEW	Normative	Standard voice communications phrases for VTS operations <ul style="list-style-type: none"> • Recognise the IMO SMCP in the Recommendation 	The list of VTS phrases could be an annex to the Recommendation, or a separate Guideline.
		IALA1040-R1002 NEW	Normative	Digital information transfer between ship and shore in VTS operations (Operational aspects)	See IALA1070 for a separate technical Recommendation to cover message format, communications channels, etc. Covers: <ul style="list-style-type: none"> • Maritime safety information (MSPs) • Route information transfer (route exchange) • Other?
	VTS technologies	IALA1040-R0128 V-128	Normative	Operational and Technical Performance of VTS Systems	
	Auditing and assessing of VTS	IALA1040-R1003 NEW	Normative	Auditing of Vessel Traffic Services	<ul style="list-style-type: none"> • Audit includes, staff, procedures, equipment and sensors, records, and recording

Standard	Topic area	Reference		Recommendation	Comment
IALA1050 Training and Certification	Training and assessment	IALA1050-R0141 E-141	Normative	Standards for Training and Certification of AtoN Personnel	Amend title
		IALA1050-R0103 V-103	Normative	Standards for Training and Certification of VTS Personnel	Amend title
	Accreditation, Competency certification and revalidation	IALA1050-R0149 O-149	Normative	Accreditation of Training Organisations	Amend Topic area title
		IALA1050-R1001 NEW	Normative	Certification of VTS personnel	Supporting Guideline
		IALA1050-R1002 NEW	Normative?	Certification of AtoN personnel	Supporting Guideline
	Simulation in training				Delete Topic area
	Human factors and ergonomics				Delete Topic area

Standard	Topic area	Reference		Recommendation	Comment
IALA1060 Digital Communication Technologies		IALA1060-R1001 NEW	Normative	Communications channels for [public service] digital information services in coastal areas. <ul style="list-style-type: none"> Single new Recommendation on (free-to-air, non-commercial) communications channels to be used by coastal authorities for digital information transfer between ship and shore in coastal areas Absorb A-123 and A-124? 	Explains/recommends our plan/vision in a single document. Supporting Guidelines would cover <ul style="list-style-type: none"> VDES Including AIS NAVDAT on 500KHz Future possibility of [NAVDAT] on 300KHz Other? Alternative following is preferable See IALA1070 below for a separate Recommendation with Guidelines for <u>data models</u> for these channels.
			ALTERNATIVE: -		
	Wide/Medium bandwidth systems (AIS & VDES)	IALA1060-R1002 NEW 2017	Normative	VDES for shore infrastructure <ul style="list-style-type: none"> Could this absorb A-123 and A-124below? 	Supporting Guidelines
		IALA1060-R0123 A-123	Normative	The Provision of Shore Based Automatic Identification System (AIS)	
		IALA1060-R0124 A-124		The AIS Service	Supporting Guideline Move recommendation content to Recommendation IALA1060-R1001 or 1002, remainder to Guideline(s)
		A-124 APPENDIX 0 to APPENDIX 19			A-124 APPENDIX 0 to APPENDIX 19 become Guidelines for Recommendation IALA1060-R1001 or 1002
	Narrow bandwidth systems (NAVDAT, MF beacons)	IALA1060-R1003 NEW	Normative	NAVDAT for MSI broadcast	Supporting Guideline <ul style="list-style-type: none"> 500KHz Other channels (MF beacons?)
	Maritime Internet of Things (Intelligent sensors, AtoN monitoring)	IALA1060-R1005 NEW	Informative	Maritime Resource Numbering	Will apply to [Maritime Cloud] and elsewhere in the maritime environment

Standard	Topic area	Reference		Recommendation	Comment
IALA1070 Information Services	Harmonised maritime connectivity framework (CMDS)	IALA1070-R0140 e-NAV-140	Informative?	The Architecture for Shore-based Infrastructure 'fit for e-Navigation'	
		IALA1070-R0148 e-NAV-148	Informative?	The need to implement regional e-Navigation solutions based on international standards	<ul style="list-style-type: none"> Do we still need this document? Could this be merged with the above?
		IALA1060-R1004 NEW	Informative	Framework for harmonised maritime connectivity	<ul style="list-style-type: none"> Placeholder for the Maritime Cloud. Name, content, need, etc., will become clearer in late 2017 or early 2018 after the E2 workshops.
	Data models and data encoding (IVEF, S-100, S-200, ASM)	IALA1070-R1001 NEW	Normative	Data models for digital information services [for VTS and AtoN services] in coastal areas (Technical)	<p>Supporting Guidelines covering data models and their management</p> <ul style="list-style-type: none"> S200 series E-NAV 147 as Guideline Application Specific Messages Route exchange/route transfer Maritime Service Portfolios Time stamps for maritime data
		e-NAV-144	Normative	Harmonized implementation of Application Specific Message (ASM)	Merge into IALA1070-R1001 and its Guidelines
		e-NAV-147	Normative	Product Specification Development and Management	Merge into IALA1070-R1001 and its Guidelines
		IALA1070-R0145 V-145	Normative	The Inter-VTS Exchange Format (IVEF) Service	Split into Recommendation and Guideline
	Data exchange systems (Traffic Information)				
	User requirements				
	Terminology and symbology (IALA Dictionary)	IALA1070-R1002 NEW	Informative	Use of IALA terms and definitions in documents and publications	Dictionary as pseudo-Guideline